

I CLAIM:

1. An electrical connector assembly comprising:

a first electrical connector having a first housing,
a first terminal unit extending outwardly from said first
5 housing, and a fastening device including two fastening
members that are disposed on said first housing and that
are located on two sides of said first terminal unit,
and two biasing members, each of which is disposed
between said first housing and a respective one of said
10 fastening members, each of said fastening members having
at least two first rib portions; and

a second electrical connector disposed in front of
and connected electrically to said first electrical
connector, said second electrical connector having a
15 second housing, a second terminal unit that extends
outwardly from said second housing and that is connected
electrically and removably to said first terminal unit,
and two limiting members disposed on said second housing
and located on two sides of said second terminal unit,
20 each of said limiting members including at least one
second rib portion disposed between said two first rib
portions of a respective one of said fastening members;

wherein one of said first and second terminal units
includes a plurality of parallel contact pins, and the
25 other one of said first and second terminal units
includes a plurality of pin holes for receiving
respectively and removably said contact pins therein

to form an electrical connection between said first and second electrical connectors; and

wherein when said fastening members of said first electrical connector and said limiting members of said second electrical connector are interconnected so that said second rib portion of each of said limiting members is disposed between said first rib portions of the respective one of said fastening members, each of said biasing members biases the respective one of said fastening members to move relative to said first housing in an axial direction of said pins so as to press one of said first rib portions of the respective one of said fastening members against said second rib portion of the respective one of said limiting members, thereby arresting movement of said fastening members toward and away from said limiting members.

2. The electrical connector assembly as claimed in Claim 1, wherein said first housing has a front end wall, a rear end wall opposite to said front end wall, two first holes formed through said front end wall, two second holes formed through said rear end wall, and two passages, each of which is in communication with a respective one of said first holes and a respective one of said second holes and has two ends that are defined by said front and rear end walls, respectively, each of said passages having a diameter larger than those of said first and second holes, said fastening members and said biasing

members being received in said passages, each of said second holes being formed with an extension portion that extends radially and outwardly therefrom, each of said fastening members being formed with a radially and outwardly extending integral projection that is disposed in the respective one of said passages and that is pressed rearwardly by the respective one of said biasing members against said rear end wall so as to prevent removal of each of said fastening members from said first housing, said fastening members being rotatable within said passages to align said projections respectively with said extension portions of said second holes, thereby permitting removal of said fastening members from said first housing through said second holes.

3. The electrical connector assembly as claimed in Claim 2, wherein each of said fastening members is formed with a shoulder, and each of said biasing members is constructed as a coiled compression spring, and presses against said front end wall of said first housing at one end, and against said shoulder of the respective one of said fastening members at the other end so as to bias said fastening members rearwardly away from said second electrical connector.

4. The electrical connector assembly as claimed in Claim 2, wherein each of said biasing members is a coiled tension spring, and is fastened to said front end wall

of said first housing at one end, and to the respective one of said fastening members at the other end so as to bias said fastening members forwardly toward said second electrical connector.

5 5. The electrical connector assembly as claimed in Claim 1, wherein each of said fastening members has an external thread at a front end thereof, each of said first rib portions forming a portion of said external thread, each of said limiting members having an internal thread at
10 a rear end thereof, said second rib portion forming a portion of said internal thread.

6. The electrical connector assembly as claimed in Claim 5, wherein each of said fastening members has a front end surface that is formed with a V-shaped groove which
15 defines two flexible sections so that, during assembly, said external threads of said fastening members can engage said internal threads of said limiting members by forcing said fastening members toward said limiting members in a direction parallel to said pins without
20 performing relative rotation between said fastening members and said limiting members.